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Fax Transmission Cover Sheet

October 8, 2010

Τo

Telephone

Fax Number

Examiner Seyed Masoud Malekzadeh

310.595.3122 (T)

571-272-6215

571-273-6215

U.S. Patent Office

From: Barry M. Shuman

Client-Matter Number:

374611-000138

310-595-3400 (Fax)

Re:

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Re:

U.S. Patent Application No.: 10/597,514

Filed: July 27, 2006

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(Form Rev. 8/02/04)

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OCT. 8. 2010 12:42PM DLA PIPER NO. 1237 P. 2/5

Appl. No. 10/597,514

Attorney Docket No. 81872.0124

Customer No.: 26021

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Youhei SAKAI, et al.

Serial No: 10/597,514

Confirmation No.: 2199

Filed:

July 27, 2006

For:

Mold, Method Of Forming The Same,

And Method Of Producing

Polycrystalline Silicon Substrate

Using The Mold

Art Unit: 1791

Examiner: Seyed Masoud

Malekzadeh

Dear Seyed Masoud Malekzadeh:

In preparation for our telephone interview which is scheduled for Wednesday, 2:00 pm (EST), October 13, 2010, we are attaching a summary of issues that we would like to discuss.

Sincerely,

Barry M. Shuman

Registration No. 50,220

Phone number: 310-595-3122 FAX number: 310-595-3422

Attorney Docket No. 81872.0124

Customer No.: 26021

NO. 1237 P. 3/5

PROPOSED CLAIM AMENDMENTS

Support for the amendment to claim 18 can be found in claim 25.

- 18. (Currently amended) A mold for producing a silicon ingot, comprising:
- a bottom surface member; and
- a plurality of lateral surface members combining with the bottom surface member.

and each lateral surface member comprising a first engaging structure on a first lateral end thereof and a second engaging structure on a second lateral end thereof, one of the first and second engaging structures of one of the plurality of lateral surface members engages with one of the first and second engaging structures of another one of the plurality of lateral surface members,

wherein the first and second engaging structures each comprises a projection and a recess, and a shape of the first engaging structure and a shape of the second engaging structure are in an asymmetrical relationship with reference to-a-center line of the lateral surface member in a plan view thereof,

wherein-the-center-line is between the first-and second engaging structures and parallel with the first and second lateral ends

wherein the plurality of lateral surface members combined with a side surface of the bottom surface member and are upright so as to surround the bottom surface member, and

the mold for producing a silicon ingot further comprising:

a mold holder configured for placing the bottom surface member and the plurality of lateral surface members that are combined;

a wedge receiver is on an upper surface of the mold holder; and

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a plurality of wedge members respectively positioned in clearances between

the wedged receiver and outer peripheral surfaces of the plurality of lateral surface

<u>members</u>.

29. (Currently amended) The mold for producing a silicon ingot according to

claim 18, further comprising:

a frame-shaped member <u>continuously</u> surrounding an outer periphery of the

plurality of lateral surface members integrated by engaging with each other, with

play a free space between the frame-shaped member and the plurality of lateral

surface members; and

a plurality of pressing jigs respectively arranged in clearances between the

frame-shaped member and outer corners formed by the lateral surface members

adjacent to each other, and configured for constraining displacement of the plurality

of lateral surface members.

ISSUE 1

The Office appears to indicate that Lovejoy (U.S. Patent No. 3,905,740)

teaches a plurality of wedge members (72, 74) (Office Action, p. 17, line 3) that

correspond to the wedge member (8) of the present invention. However, the wedge

members (72, 74) of Lovejoy exist <u>inside of the article 10</u> to press the melt material

from the inside of the article 10 (see e.g., Fig. 6 of Lovejoy), whereas in the present

invention, the wedge member 8 is positioned between the wedge receiver (10) and

the lateral surface member (3).

ISSUE 2

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The Office refers to reference numeral "60" of Lovejoy as being both a "groove" (see e.g., Office Action, p. 17, line 1) and a "second mold section" (see e.g., Office Action, p. 15, lines 1-2 and p. 15, lines 7-8). Applicant would like a clarification. In addition, Applicant does not believe Lovejoy discloses a "groove".

ISSUE 3

The Office appears to indicate that Sakaguchi (JP 10-182285) teaches L-shaped notch portion 4 (Office Action, p. 8, 2nd line from bottom), and fastening bolt 5 that are the frame-shaped members (4, 5) and the frame-shaped members (4, 5) surround an outer periphery of the lateral surface members (2, 3) (Office Action, p. 12, lines 15-21). Applicant respectfully disagrees that such members (4, 5) surround the lateral members (2, 3). Furthermore, Sakaguchi fails to teach or suggest the construction of amended claim 29 wherein the frame-shaped member continuously surrounds the outer periphery of the lateral surface members.